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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,140	04/20/2005	Hisayuki Kawamura	28955.4025	6207
27890	7590	09/26/2007		
STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			EXAMINER KOSACK, JOSEPH R	
			ART UNIT 1626	PAPER NUMBER
			MAIL DATE 09/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,140	Applicant(s) KAWAMURA ET AL.	
	Examiner Joseph Kosack	Art Unit 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 3-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-6 are pending in the instant application.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on July 19, 2007 has been entered.

Previous Claim Objections

Claims 1-2 were objected to in the previous action for containing elected and non-elected subject matter. The non-elected subject matter has been cancelled, and the objection is withdrawn.

Previous Claim Rejections - 35 USC § 112

Claims 1-2 were rejected in the previous action under 35 U.S.C. 112, second paragraph as being indefinite. Applicant's clarification in the remarks of July 19, 2007 of the count of nuclear carbon atoms has been found to be persuasive and the rejection is withdrawn.

Previous Claim Rejections - 35 USC § 103

Claims 1-2 were rejected in the previous action under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. (WO/00/14174 A1).

Applicant has traversed the rejection that Kawamura et al. do not adequately suggest the compounds and that the Kawamura et al. compounds do not emit blue light.

This is not found to be persuasive. Firstly, Kawamura et al. envisioned compounds that would meet the proviso set out in the claims. Since the last action, Applicant has cancelled the second proviso, so the only proviso in the claims is that at least one of Ar³-Ar⁸ have 10-18 nuclear carbon atoms.

Kawamura et al. set that their instant Ar¹ through Ar⁶ are aryl groups having from 6 to 24 nucleus carbon atoms, R¹ and R² are hydrogen atoms, and X is a single bond. See page 3. Kawamura et al. teach compounds that separately teach the proviso, but do not meet the conditions of Ar¹ or Ar² of the instant application to have 10-18 nuclear carbon atoms as stated in the previous action. Since Kawamura et al. surely envisions modifications to the species presented in order to practice the full scope of the claimed invention, the compounds are adequately suggested.

Secondly, the fact that the instant compounds emit blue light is looked at as part of the preamble of the claim. It has been stated in the previous action that if the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. Therefore, the structural components of the claims are met and therefore the preamble is met.

Finally, if the emission of blue light is to be looked at as a functional limitation, it must be known what structural component of the claim is essential to emitting blue light. Otherwise, it must be looked at that any compound that meets the structural components of the claim also meets the functional limitation.

Therefore, the rejection must currently stand.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a

Art Unit: 1626

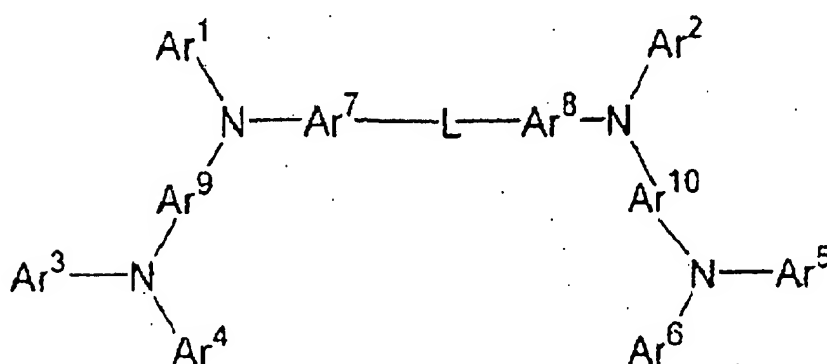
later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2 rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. (WO/00/14174 A1).

According to MPEP 2111.02, "If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction.

Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999)."

The instant invention cites a compound of the formula



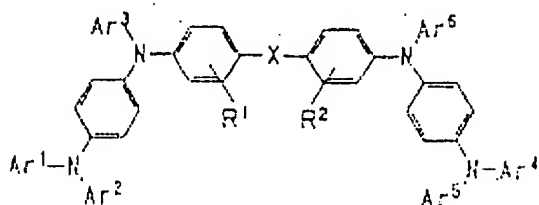
where: L is a

single bond, Ar¹ through Ar² are condensed aryl groups having 10-18 nuclear carbon atoms, Ar³ to Ar⁶ are aryl groups having 6 to 18 nuclear carbon atoms; and Ar⁷ to Ar¹⁰ are arylene groups having 6 to 18 nuclear carbon atoms.

Determination of the scope and content of the prior art (MPEP §2141.01)

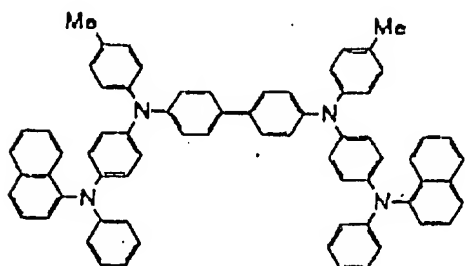
Art Unit: 1626

Kawamura et al. teach a compound of formula



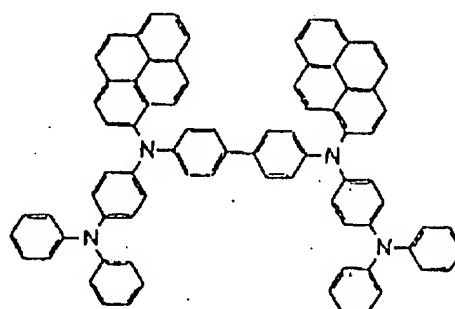
with substitutions as defined. See page

3. Kawamura et al. also teach the particular compounds:



PD-34

and



PD-52

See pages 25 and 29.

Ascertainment of the difference between the prior art and the claims (MPEP

§2141.02)

Kawamura et al. do not teach specifically the proviso at the end of claim 1 that at least one of Ar³ to Ar⁶ is a condensed aryl group having 10 to 18 nuclear carbon atoms or that the compounds emit blue light.

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

Kawamura et al. suggest the compound of the instant invention where Ar¹ through Ar⁶ are aryl groups having from 6 to 24 nucleus carbon atoms, R¹ and R² are hydrogen atoms, and X is a single bond. See page 3. Also, by virtue that individual compounds teach separately the conditions of the proviso, it is within

Art Unit: 1626

the purview of one of ordinary skill to modify the structure of compound PD-34 cited above to include the aryl groups designated in the Ar³ and Ar⁶ positions (Ar¹ and Ar² in the instant case) from compound PD-52. Apart from a showing of unexpected results, the person of ordinary skill would deem that the disclosure of Kawamura et al. renders the instant claims obvious. Additionally, the condition that the compounds emit blue light is in the preamble of the claim. Since the suggestion of Kawamura et al. meets the structural components of the claim, it also meets the preamble of the claim.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention was made to follow the synthetic scheme of Kawamura et al. to make the claimed invention. The motivation to do so is provided by Kawamura et al. Kawamura et al. teach the use of the compounds as a electroluminescent material with a small ionization potential and exhibits a large hole mobility when it is used as a layer or a zone. See page 2.

Thus, the claimed invention as a whole was *prima facie* obviousness over the combined teachings of the prior art.

Conclusion


Claims 1-2 are rejected.

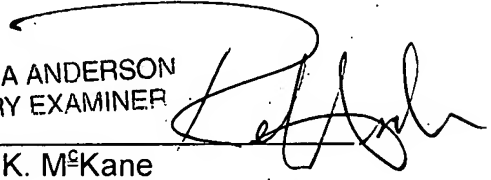
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Kosack whose telephone number is (571)-272-5575. The examiner can normally be reached on M-F 6:30 A.M. until 4:00 P.M. The examiner has every other Friday off.

Art Unit: 1626

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph M^eKane can be reached on (571)-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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